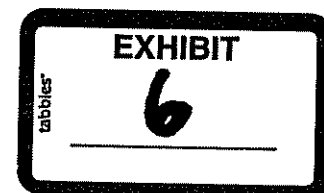


**IN THE UNITED STATES DISTRICT COURT FOR
THE NORTHERN DISTRICT OF OKLAHOMA**

STATE OF OKLAHOMA,)	
)	
Plaintiff,)	
)	
v.)	Case No. 05-CV-00329-GKF-SAJ
)	
TYSON FOODS, INC., et al.,)	
)	
Defendants.)	

**SUPPLEMENTAL OBJECTIONS AND RESPONSES OF STATE OF
OKLAHOMA TO SEPARATE DEFENDANT TYSON FOODS, INC.'S FIRST
SET OF INTERROGATORIES PROPOUNDED TO PLAINTIFFS**

COMES NOW, the Plaintiff, the State of Oklahoma, ex rel. W.A. Drew Edmondson, in his capacity as Attorney General of the State of Oklahoma, and Oklahoma Secretary of the Environment, C. Miles Tolbert, in his capacity as the Trustee for Natural Resources for the State of Oklahoma under CERCLA, (hereinafter "the State") and supplements its previous response to Defendant Tyson Foods, Inc's First Set of Interrogatories in accordance with the Court's Order of February 26, 2007 [Dkt. # 1063]. The State incorporates its previous response and objections to these interrogatories as if fully stated herein. Further, the State reserves the right to supplement its responses as responsive information is identified.



The above listed documents, with the exception of the Septic System permits, have been previously produced to the Defendants; others will be produced at upcoming document productions at the Oklahoma Department of Agriculture, Food and Forestry. If Defendant did not copy any of the above, the State will work them to get them copies of the documents. The State reserves the right to supplement this response if additional responsive information is identified. The State hereby withdraws its previous Fed.R.Civ. P. 33(d) designation for this interrogatory.

INTERROGATORY NO. 7: Please describe all evidence and Identify all Documents You contend support Your allegation that the Tyson Defendants caused the release of any “hazardous substance” (as that term is defined in CERCLA, 42 U.S.C. § § 9601 et seq.) into any Water Body within the IRW, and in doing so, Identify each such release by specific hazardous substance, location, source, volume, time period of release, owner and/or operator of the source, generator of the hazardous substance, and the transport mechanism and pathway from the source location to the identified Water Body.

SUPPLEMENTAL RESPONSE TO NO. 7

The State objects to this interrogatory to the extent it seeks information protected by the attorney client privilege or work product protection. Further, the State objects to this interrogatory to the extent that it seeks information known or opinions held by expert consultants retained or specially employed by the State or by its counsel in anticipation of litigation or preparation for trial. Fed.R.Civ.P. 26(b)(4)(A) and (B).

The State objects to this interrogatory on the ground that it improperly seeks identification of “all” items of responsive information, which renders it overly broad and

oppressive. It may be impossible to locate “all” items of responsive information to this interrogatory. The State incorporates its response to Cobb-Vantress Interrogatory No. 5. as if stated fully herein.

Subject to and without waiving objections heretofore made to this interrogatory, the State intends to demonstrate a release of a hazardous substance through expert testimony that is based on (1) published treatises and peer reviewed articles on relevant and applicable subjects (discussed below), and (2) the evaluation of sampling and analysis data collected by the State and its consultants. The State will call expert witnesses at trial that will demonstrate that land application of the Defendant’s wastes (i.e., the wastes of its growing operations and that of its contract growers) within the IRW release contaminates contained in these wastes into the environment when rainfall: (1) washes off the constituents of these wastes and the land applied soils and they together run off of the area that was land applied and flow into IRW surface waters, and (2) seep and leach from the land applied soils into ground waters that flow into IRW surface waters. In particular, these expert witnesses will demonstrate violations by:

(A) Showing that the soils and Karst geology that make up the IRW are particularly susceptible of surface water runoff and seepage and leaching into the groundwater. Additionally, the hydrogeological connection between and among the land surface, the ground waters and the surface waters within the IRW will be shown that will demonstrate the “pathway” to and through surface and ground water that runs into the streams and rivers of the IRW and eventually into Lake Tenkiller;

- (B) Showing that a chemical “finger print” is found all along this water pathway (from waste application sites to Lake Tenkiller) by analysis and comparison of the chemical attributes of the Defendant’s waste, the soils on which those wastes are applied, the groundwater and surface waters leaving land applied locations, the water and sediments of the streams and rivers that collect the these runoff and ground waters, and the and sediments of Lake Tenkiller;
- (C) Lake Tenkiller core analysis and comparison with (i) other Lakes and (ii) poultry and waste growth and production;
- (D) Historical poultry waste contaminant concentration trend analyses in the IRW surface waters (including Lake Tenkiller) and comparison with poultry production and waste volume in the IRW;
- (E) Demonstrating poultry waste indicator chemicals and substances at locations that are co-incident with locations within the IRW that experience injury for which the State seeks damages and injunctive relief;
- (F) Demonstrating that the density of poultry operations directly influences the concentrations phosphorous in IRW streams and rivers and that the contributions of phosphorous from land application of poultry waste causes the injuries to IRW water quality and biota for which the State seeks damages and injunctive relief;
- (G) Show that poultry waste is the major contributor of nutrients in the IRW using a nutrient mass balance analysis.

The State and its experts are still collecting data and performing analysis on the data which will be used in their opinions and reports. The State refers Defendant to all

sampling documents and investigations included in the State's February 1st, 3rd, and 8th document production and updates thereto. *See* OK-PL4744-OK-PL5863 and OK-PL4333-OK-PL4743 for investigative documents. Analytical results for phosphorus, nitrogen compounds including ammonia, copper and copper compounds, arsenic and arsenic compounds, zinc and zinc compounds are contained in the reports from Aquatic Research and A&L Analytical Laboratories. Data providing results of these substances associated with litter or soil applied with waste from Tyson associated facilities are found in A&L Analytical Laboratories Report Numbers: 06-178-204, 06-179-0204, 06-193-0223, 06-194-203, 06-181-9210, 06-187-202, 06-208-0216, 06-188-0201, 06-192-0200.

The State hereby withdraws its previous Fed.R.Civ.P. 33(d) designation for this interrogatory. The State reserves the right to supplement this response if additional responsive information is identified.

INTERROGATORY NO. 8: Please describe all activities that have been conducted by any person, Entity or Agency within Your knowledge to investigate, evaluate, study, model or otherwise determine any characteristic of the water in the IRW, contaminant loading, or the conditions of any Water Body within the IRW, and in doing so, Identify all persons, Entities of Agencies with knowledge of such activities, and state for each such activity, what actions were taken, the time period of the activity, the objective(s) of the activity, who funded the activity, any conclusions, observations, or recommendations from the activity. Also, please Identify all Documents Related to such activity.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 8

The State objects to this interrogatory to the extent it seeks information protected by the attorney client privilege or work product protection. Further, the State objects to

this interrogatory to the extent that it seeks information known or opinions held by expert consultants retained or specially employed by the State or by its counsel in anticipation of litigation or preparation for trial. Fed.R.Civ.P. 26(b)(4)(A) and (B).

The State objects to this interrogatory on the ground that it improperly seeks identification of “all” items of responsive information, which renders it overly broad and oppressive. It may be impossible to locate “all” items of responsive information to this interrogatory.

The following list is not exhaustive and does not include every study to look at any characteristic of the Illinois River Watershed. It is merely representative. Subject to and without waiver of these objections the State refers Defendants to the following and will supplement as appropriate:

1. Diagnostic and Feasibility Study on Tenkiller Lake, Clean Lakes Report, Oklahoma – June 1996. OSRC Log 1-30
2. USGS – National Water-Quality Assessment Program – Water-Quality Assessment of the Ozark Plateaus Study Unit, Arkansas, Kansas, Missouri, and Oklahoma – Fish Communities in Streams and Their Relations to Selected Environmental Factors. OSRC 2-8
3. USGS Prepared in Cooperation with the Arkansas Soil and Water Conservation Commission – Phosphorus and Nitrogen Concentrations and Loads at Illinois River South of Siloam Springs, Arkansas, 1997 – 1999. OSRC 2-10
4. USGS National Water-Quality Assessment Program – Water-Quality Assessment of the Ozark Plateaus Study Unit, Arkansas, Kansas, Missouri, and Oklahoma – Nutrients, Bacteria, Organic Carbon, and Suspended Sediment in Surface Water, 1993-95 OSRC 2-11
5. USGS Preliminary Analysis of Phosphorus Concentrations and Fecal-Indicator Bacteria Counts at Selected Sites in the Illinois River Basin in Oklahoma, 1997-2001. OSRC Log 2-13
6. USGS Monitoring Network in the Illinois River Basin. OSRC Log 2-14

7. Basin-Wide Pollution Inventory for the Illinois River Comprehensive Basin Management Program – Final Report- (OSU August, 1996). OSRC Log 3-1
8. Coordinated Watershed and Restoration Protection Strategy for Oklahoma's Impaired Scenic Rivers (Per SB 972) 2002, 2004-2006 Update located at <http://www.environment.ok.gov/>.
9. Oklahoma's Beneficial Use Monitoring Program – Final Report 1998 OSRC Log 2-15
10. Oklahoma's Beneficial Use Monitoring Program – 1999 Final Report OSRC Log 2-16
11. Nonpoint Source Impacts to Aquatic Macroinvertebrate Communities of the Upper Illinois River Watershed OSRC Log 3-12
12. An Intensive Survey of Tahlequah Creek, Oklahoma – Water Quality Division – Oklahoma Water Resources Board (November 3, 1986) OSRC Log 3-13
13. Trends in Stream Water-Quality Data in Arkansas During Several Time Periods Between 1975 and 1989. OSRC Log 3-14
14. Water Quality Survey of the Illinois River and Tenkiller Reservoir (June 1976 – October 1977). OSRC Log 3-15
15. Ecology of Tahlequah Creek, A Small Ozark Creek in Oklahoma – Oklahoma Water Resources Board (November 15, 1988). OSRC Log 3-17
16. Green, W R and Haggard, B E. (2001) Phosphorus and Nitrogen Concentrations and Loads at Illinois River South of Siloam Springs, Arkansas, 1997-1999. United States Geological Survey 2001-4217.
17. Nelson, M, White, K, Soerens, T. (2002) Illinois River Phosphorus Sampling Results and Mass Balance Computation. Arkansas Water Resources Center MSC-336.
18. Nelson, M, Cash, W, Trost, K, Purtle, J. (2005) Illinois River 2004 Pollutant Loads at Arkansas Highway 59 Bridge. Arkansas Water Resources Center MSC-325.
19. Nelson, M, Cash, W, Trost, K, Purtle, J. (2006) Illinois River 2005 Pollutant Loads at Arkansas Highway 59 Bridge Arkansas Water Resources Center MSC-332.

20. Petersen, J, Adamski, J, Bell, R, Davis, J, Femmer, S, Freiwald, D, Joseph, R. (1998) Water Quality in the Ozark Plateaus, Arkansas, Kansas, Missouri, and Oklahoma, 1992-95. United States Geological Survey Circular 1158, p. 2-4.
21. Popova, Y, Keyworth, V, Haggard, B, Storm, D, et al. (2006) Stream Nutrient Limitation and Sediment Interactions in the Eucha-Spavinaw Basin. Journal of soil and water conservation 61(2): 105-115.
22. Oklahoma Department of Environmental Quality (1998 -2004), Water Quality Assessment Integrated Reports. (ODEQ)
23. Storm, D, Sabbagh, Gregory, M, Smole, M, Toetz, D, Gade, D, Haan, T, Kornecki, T. (1996) Basin-Wide Pollution Inventory for the Illinois River Comprehensive Basin Management Program. (OSU)
24. Storm, D, White, M, Haggard, B., Smole, M. (2003) Illinois River-Upland and in-Stream Phosphorus Modeling Final Report. (OSU)
25. Storm, D E, White, M J, Smolen, M D. (2006) Illinois River Upland and in-Stream Phosphorus Modeling. (OSU)
26. Watershed Restoration Strategy for the Illinois River (OCC 1999) located at https://www.deq.state.ok.us/WQDnew/pubs/illinois_river_wras_final.pdf.
27. Water Quality Monitoring Reports, Illinois River Basin, Arkansas-Oklahoma Compact Commission, (CY 2002-2006) which were produced at multiple agencies.
28. An Investigation of the Sources and Transport of Nonpoint Source Nutrients in the Illinois River Basin in Oklahoma and Arkansas (Gade 1998) located at <http://storm.okstate.edu/>.
29. Water Quality Modeling Analysis in Support of TMDL Development for Tenkiller Ferry Lake and the Illinois River Watershed in Oklahoma, (Draft March 2001).
30. Historic state agency and USGS sampling data produced or to be produced at the agency productions.
31. Monitoring of Tenkiller Ferry Lake near Horseshoe Bend and Caney Creek to Support Lake Tenkiller TMDL and BMP Activities – Draft Final Report (August 16, 2001 OWRB) located at OSRC 5-20.
32. OWRB 2001 through 2005 BUMP Reports <http://www.owrb.ok.gov/quality/monitoring/bump.php>.

33. Robert L. Tortorelli and Barbara E. Pickup, Phosphorus Concentrations, Loads and Yields in the Illinois River Basin, Arkansas and Oklahoma, USGS 2006-5175.

Persons with knowledge of some the above cited documents, include but are not limited to, the following:

1. Derek Smithee-Oklahoma Water Resources Board
2. Bill Cauthron-Oklahoma Water Resources Board
3. Phil Moreschel-Oklahoma Water Resources Board
4. Mark Derichweiler-Oklahoma Department of Environmental Quality
5. Dan Butler-Oklahoma Conservation Commission
6. Shannon Phillips-Oklahoma Conservation Commission
7. Dan Storm-Oklahoma State University
8. Andrew Sharpley-University of Arkansas
9. Brian Haggard-University of Arkansas
10. Kim Winton-United State Geological Service
11. Bob Blazs-United States Geological Service
12. Bob Tortorelli-United State Geological Service

The State hereby withdraws its previous Fed.R.Civ.P. 33(d) designation for this interrogatory.

INTERROGATORY NO. 9:

Please identify every source of phosphorus/phosphorus compounds, nitrogen/nitrogen compounds, arsenic/arsenic compounds, zinc/zinc compounds, cooper/cooper [sic] compounds, hormones, microbial pathogens or other alleged hazardous substances, pollutants or contaminants within the IRW, which you allege in the Complaint to be Related to poultry industry operations. In doing so, please Identify each

source by specific location, owner or operator, if any, and the mechanism and/or pathway for the transport of the alleged hazardous substances, pollutants or contaminants from the source to any Water Body within the IRW. Also, please identify all Documents Related to such sources.

SUPPLEMENTAL RESPONSE TO INTERROGATORY NO. 9

The State objects to this interrogatory to the extent it seeks information protected by the attorney client privilege or work product protection. Further, the State objects to this interrogatory to the extent that it seeks information known or opinions held by expert consultants retained or specially employed by the State or by its counsel in anticipation of litigation or preparation for trial. Fed.R.Civ.P. 26(b)(4)(A) and (B).

The State objects to this interrogatory on the ground that it improperly seeks identification of "all" items of responsive information, which renders it overly broad and oppressive. It may be impossible to locate "all" items of responsive information to this interrogatory. The State incorporates its response to Tyson Foods Interrogatory No. 7 as if fully stated herein.

The State refers Defendants to the material produced by the State in February, 2007 and subsequent productions produced pursuant to the Court's January 5, 2007 Order, including but not limited to, information at the following locations/bates numbers: OK-PL 4744-5863 found in Box 4 produced in February and OK-PL 433-47433 found in Box 3 and analytical results for phosphorus, nitrogen compounds including ammonia, copper and copper compounds, arsenic and arsenic compounds, zinc and zinc compounds are contained in the reports from Aquatic Research and A&L Analytical Laboratories. Data providing results of these substances associated with litter or soil applied with waste

from Tyson associated facilities are found in A&L Analytical Laboratories Report Numbers: 06-178-204, 06-179-0204, 06-193-0223, 06-194-203, 06-181-9210, 06-187-202, 06-208-0216, 06-188-0201, 06-192-0200.

The State also refers Defendants to Oklahoma Department of Agriculture Food and Forestry files produced on June 15, 2006, Bates Numbers OKDA0000001-OKDA0010561 and OKDA0013013-OKDA0021846. Updated grower files will be produced in accordance with the Court's Order of March 26, 2006 at a yet to be scheduled document production at ODAFF.

The State's investigation into every source related to poultry operations is ongoing. The State's experts are still evaluating the relevant data for their reports which will address in detail the foregoing matters. This Interrogatory will be supplemented by such Expert reports at the time required by the Court's Scheduling Order [Dkt. # 1075]. The State reserves the right to supplement this response.

INTERROGATORY NO. 10: Please describe all evidence and Identify all Documents You contend supports Your allegation that the actions or inactions of any Tyson Defendant pose a threat to the health of any person in the IRW, and in doing so, please state for each such action or inaction, the specific conduct and Tyson Defendant You contend is responsible, and describe the specific threat posed to human health.

SUPPLEMENTAL RESPONSE TO NO. 10

The State objects to this interrogatory to the extent it seeks information protected by the attorney client privilege or work product protection. Further, the State objects to this interrogatory to the extent that it seeks information known or opinions held by expert

consultants retained or specially employed by the State or by its counsel in anticipation of litigation or preparation for trial. Fed.R.Civ.P. 26(b)(4)(A) and (B).

The State objects to this interrogatory on the ground that it improperly seeks identification of “all” items of responsive information, which renders it overly broad and oppressive. It may be impossible to locate “all” items of responsive information to this interrogatory. The State incorporates its response to Tyson Foods Interrogatory No. 7 and Tyson Chicken No. 4 as if fully stated herein.

Subject to and without waiver of these objections, Defendant’s land application of poultry waste in the IRW includes, because they are constituents of their waste, disposal and releases of nutrients, metals, hormones, and bacteria which are transported to the surface and ground waters of the IRW.

The threats to human health include the transport of fecal bacteria in their poultry waste into the surface and ground waters of the IRW at levels that exceed health-based standards for primary body contact recreation and health-based standards for groundwater consumption. For example, the 2005 Beneficial Use Monitoring Program (“BUMP”) report relevant to the IRW concludes that the use of primary body contact recreation is not supported because of fecal bacteria concentrations in Flint Creek, the Illinois River near Watts, and the Baron Fork near Eldon. Additional documents showing similar bacterial concentrations are found in the documents produced to the Defendants of the State’s sample and analysis reports produced in February 1, 2007 and updates to that production pursuant to the Court’s January 5, 2007 Order [Dkt. 1016].

The increase in the nutrient levels in the surface waters of the IRW from waste disposal operations of the Defendants has increased the concentration of cyanobacteria in the surface waters of the IRW.

The increased nutrient levels in the surface waters of the IRW caused by Defendants waste disposal practices has also caused an increase of algae in the IRW surface waters which has increased the concentrations of disinfectant byproducts in the public drinking water supplies of the IRW. Similarly, the total organic carbon loading of the surface waters of the IRW resulting from Defendant's waste disposal practices has also increased the concentrations of these disinfectant byproducts.

The State's investigation into human health risks resulting from Defendant Tyson is ongoing. The State's experts are still evaluating the relevant data for their reports which will address in detail the foregoing matters. This Interrogatory will be supplemented by such Expert reports at the time required by the Court's Scheduling Order [Dkt. # 1075].

The State reserves the right to supplement this response.

The State refers, without limitation, Defendant to the following documents, showing a threat to human health:

Analytical results for phosphorus, nitrogen compounds including ammonia, copper and copper compounds, arsenic and arsenic compounds, zinc and zinc compounds are contained in the reports from Aquatic Research and A&L Analytical Laboratories. Data providing results of these substances associated with litter or soil applied with waste from Tyson associated facilities are found in A&L Analytical Laboratories Report

Numbers: 06-178-204, 06-179-0204, 06-193-0223, 06-194-203, 06-181-9210, 06-187-202, 06-208-0216, 06-188-0201, 06-192-0200.

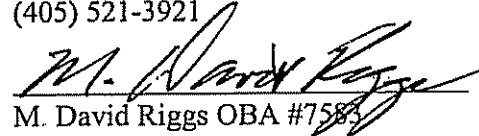
Public Water Supply Reports (<http://sdwis.deq.state.ok.us>).

State agency and USGS water quality results produced and to be produced at state agencies.

If Tyson does not have a copy of the USGS and state agency water quality data, the State will produce it to them again at their request.

Respectfully Submitted,

W.A. Drew Edmondson OBA # 2628
Attorney General
Kelly H. Burch OBA #17067
J. Trevor Hammons OBA #20234
Assistant Attorneys General
State of Oklahoma
313 N.E. 21st St.
Oklahoma City, OK 73105
(405) 521-3921



M. David Riggs OBA #7583
Joseph P. Lennart OBA #5371
Richard T. Garren OBA #3253
Douglas A. Wilson OBA #13128
Sharon K. Weaver OBA #19010
Robert A. Nance OBA #6581
D. Sharon Gentry OBA #15641
Riggs, Abney, Neal, Turpen,
Orbison & Lewis
502 West Sixth Street
Tulsa, OK 74119
(918) 587-3161

James Randall Miller, OBA #6214
Louis Werner Bullock, OBA #1305
Miller Keffer & Bullock
222 S. Kenosha
Tulsa, OK 74120-2421
(918) 743-4460